

Is Technology a Top 10 Board Issue?

Background

This paper presents a case for AICD enhancing its activities to recognise the increasing importance for Directors to have an understanding of technology in order to properly meet their duties. Boards and individual Directors need assistance in developing the skills that are needed to support the transitions that will inevitably be driven by productivity and growth goals. This transition will need Board oversight and for directors to be vigilant in their pursuit of knowing what is possible from the application of emerging technologies so the AICD has a major opportunity to address this demand.

Meeting this challenge will ensure that the considerable success AICD has achieved with board governance will continue helping top performing boards meet the challenges presented by technology change. With further development of training programmes, development activities and networking opportunities for members the AICD will enhance its leadership role.

Executive Summary

Technology has changed how people communicate, collaborate and behave, creating better ways of working, learning and living which in turn is changing how organisations can be designed. Consequent changes in how value is created have profoundly changed the economy and our society.

Boards and directors need to understand the opportunities, benefits and potential of emerging technologies to drive productivity through innovation and enable their organisations to be competitive in a tightly connected economy. These technologies include high-speed broadband, mobile devices, cloud computing, Big Data, robotics, intelligent systems, social media and collaboration tools.

Just as decisions on war are too important to leave to the generals, in today's world decisions on technology are too important to be left to the CIO and external consultants. Those responsible for governing our organisations must also govern technology making it one of the most important top 10 board issues.

A strong board must maintain a real understanding of technology trends including impacts on consumer markets and business productivity, new markets, new businesses, competitive pressures. To meet this demand directors must hold either a technology background, have held a senior executive role that gave them the opportunity to develop a working knowledge of technology issues, or undertake professional development to obtain the necessary technology governance knowledge and expertise.

A corollary of this is that board risk management committees must include technology as part of their standard agenda. Failures can have a catastrophic impact on the entity's viability.

Why is this important to the AICD?

The AICD has assisted many Australian boards that are now considered world-leading performers in how they govern their organisations. This has been achieved by promoting quality governance practices. The value of this can be measured in the performance of the organisations. The purpose of good governance is to

develop quality organisations that achieve desired goals and conform to the policies and procedures set down by the board.

Because technology is creating better ways of working, learning and living it is becoming pervasive and impacting everyone in both developed and developing economies. Every organisation is facing significant changes in how they operate and achieve their purpose because of the capability and capacity of rapidly changing technology. We can do things today that were just not possible 3 or 4 years ago.

Boards need to evolve towards technology fluency so just as we have moved from IQ to EQ Boards now need TQ or Technology Quotient (not just TQM of old!) and be able to make critical decisions on technology projects across:

- Cloud turning technology into a utility service
- Mobility connecting technology to everyone everywhere
- Big Data providing decision-making support by turning data into real evidence
- Social Media connecting everyone to everybody

Diane Smith-Gander FAICD responded to these challenges for directors and their boards warning that companies need to think about how they communicate with their customers and that boards need to be more technology savvy. Importantly she stated in her recent article in Company Director, "All directors need some understanding of technology and how it effects their organisations just as they need to understand the finance function."

Since the IBM CEO Study series began in 2004, technology has progressively risen on CEO's radars. CEOs ranked it sixth in importance in 2004, jumping to third spot in 2006 but in 2012 technology rose for the first time to top of the list.¹

If boards ignore or worst still fail to understand the implications from rapid technology change it will not be just retailers and newspaper proprietors lurching from one market down grade to the next. To continue to assist boards to grow and to be considered world-leading performers the AICD must provide them with a framework to assess technology within their organisations from a risk-management and strategic perspective.

What makes Technology Strategic?

Everyone in the world is becoming connected to everybody else directly through social media and other mobile applications and indirectly through trillions of devices. The profound changes include:

- **Commerce and transactions** - The buyer is better informed so has much more power and influence in how the transaction is conducted.
- **Consumer choice** - People can connect, communicate and collaborate which is rapidly changing consumer behaviour.

¹ "Leading Through Connections: Insights from the Global Chief Executive Officer Study." IBM Institute for Business Value. May 2012. www.ibm.com/ceostudy

- **Company capacity and capability** - Technology is magnifying capacity and capability of people and most things can be done at a distance and at a time of ones choosing.
- **Competitive innovation and creative growth** - Digital artefacts spin off from everything that is done providing data that can be analysed to produce patterns that support evidenced based decision-making.

Improved living standards are a result of increased productivity from innovation. Capital investment in technology drives productivity reducing the need to improve competitiveness by lowering wages. Technology must be important to directors because technology has the potential to change how organisations are designed and how people communicate, collaborate and consult. Recent research by McKinsey² indicates that half the synergies in M&A depend on technology. If directors are ignorant of that potential how can they govern their organisations and be judged as leading performers on any scale? McKinsey recommend that this demands new forms of thinking about board organisation and about new ways of the board interfacing with management.

Deloitte argues that fundamentally different types of institutions are needed to compete because in our rapidly evolving environment organisations must simultaneously accelerate learning and achieve much higher levels of efficiency in everything we do. "To do so, we need to rethink the rationale for firms."³ Technology is removing constraints in how we rethink that rationale and therefore makes technology arguably the most important issue facing board directors today.

IBM commissioned research from the National Institute of Economic and Industry Research (NIEIR) provides evidence that Australian enterprises will need to adapt, change and take advantage of key technologies to lead in the digital economy and compete in what IBM terms the era of "smart". This research published in August 2013, forecasts that significant gaps will open up between major Australian enterprises that actively transform their operations for the coming digitally enabled economy and those that stick to business as usual.⁴

How Should Boards Deal with Technology?

Boards must be able to ask the tough questions that their executives may have missed. Whilst most directors can judge if they have a poor CFO far fewer are confident of judging if they have a poor CIO. A standard list of questions to ask of any technology proposal does not help a director dig deeper and thoroughly question the answers they were given first time round.

The South African Code of Company Governance mandates regular interactions between boards and executives on technology. What more is required to ensure Australian boards continue to be considered world-leading performers in how they govern their organisations?

² "Understanding the Strategic Value of IT in M&A" 2011 McKinsey & Co

³ Institutional innovation: Creating smarter organizations to scale learning
www.deloitte.com/centerforedge

⁴ <http://www-03.ibm.com/press/au/en/pressrelease/41711.wss>

1. Conduct annual technology reviews involving forward looking conversations on how technology is impacting their industries and what are likely effects on their strategic plan.
2. Twice yearly presentations of "what's coming" placing the emphasis on radical new ways of doing business enabled by extraordinary emerging technologies that will place directors on alert and encourage thinking about new ways of doing business and thinking about impacts that otherwise might be missed.
3. Conduct board reviews of major technology projects to determine the impact on corporate strategy and achievements.
4. Determine what is the role for Risk Committees in the management and mitigation of technology risk.
5. Consider the establishment of a Technology Advisory Board and determine its status with the board.

The British Standard ISO 38500:2008 is a framework for evaluating, directing and monitoring the use of information technology. Similarly to the Australian standard⁵ it proposes a framework for the organisation that covers the responsibility, strategy, acquisition, performance, conformance and human behaviour involving IT.

A mature approach to governing technology will ensure that the directors are comfortable with their governance of technology in the knowledge that management has maximised the application of appropriate technologies to achieve the set goals within the appetite for risk they have laid down for their business. That the board is happy to leave their shareholders to independently choose to invest in applications of technologies outside of the level of risk set by the board as did Fairfax with Seek, Car Sales and RealEstate.com. But in that case hindsight has shown that the board incorrectly determined the level of risk that has become a catastrophic impact from those emerging online competitors.

This transition in thinking is moving boards from "let's get a technology savvy director and they can think about this" to the space they need to be in "let's have a board that understands and explicitly oversees the company's technology related risks and opportunities".

How Should AICD Respond

1. Update the appropriate parts of Company Directors Course with more emphasis on:
 - a. Capital Allocation
 - b. Technology decision making
 - c. Technology governance
2. Policy development for Technology Governance with industry associations including the Australian Information Industry Association.

5

[http://infostore.saiglobal.com/store2/results2.aspx?searchType=simple&publisher=AS&keyword=IT+G
overnance](http://infostore.saiglobal.com/store2/results2.aspx?searchType=simple&publisher=AS&keyword=IT+Governance)

3. Establish a Technology Governance Committee and conduct a research project on Technology Governance.
4. Publish an authoritative report on effective technology decision-making and governance covering:
 - a. Technology transformation
 - b. Impact on existing business
 - c. Project risk and reward analysis
 - d. Accountability frameworks
 - e. Investment decisions
5. Include more technology events in the AICD Calendar
6. Add technology governance to the Directors Update event
7. Keep adding articles on technology governance to the Directors Journal

Whilst I take full responsibility for the paper especially any errors and omissions I would like to thank the following people for sharing their deep insights and extensive experience in board governance that has enhanced the original paper substantially.

Warren Anderson Gartner	Bruce Linn AICD
Alan Castleman The Board Advisory Group	Charles Macek AICD Corporate Governance Committee
Lyndsey Cattermole Non Exec Director	Pip Marlow Microsoft
Jim Craig Macquarie Corporate Advisors	Peter Murchland Strategic Consultant
John Craven DB Results	Susan Oliver Scale Investors
Andrew Donovan Thoughtpost Governance	John Pitaridis Optus
John Grant Data#3	Elizabeth Proust Bank of Melbourne
Tom Harley Dragoman	Diane Smith-Gander Transfield Services
Robert Hillard Deloitte	Andrew Stevens IBM
Peter Kronborg Emergency Services Telecommunications Authority	Tom Stianos SMS

Russell Yardley FAICD
<http://www.linkedin.com/in/russellyardley>

E: yardley@algonquininvestments.com

M: 0418 586 364

Chairman of Alcidion Corporation, an Adelaide based health informatics business, Chairman of Readify a Melbourne based Software Innovations business and Non-executive director of Bienalto a Sydney based digital analytics company majority owned by WPP Wunderman. Chairman of iAwards Australia's premier technology innovation awards programme hosted by the Australian Computer Society (ACS), Australian Information Industry Association (AIIA) and the Pearcey Foundation. National Treasurer and director of AIIA. Independent Board member Registrations and Licensing Project Governor Victorian Government. Exco member of Asia Pacific ICT Alliance of 16 Asian Economies.